2006 U.S. EPA, NSF, and NIOSH STAR Nanotechnology Environmental Implications Progress Review Workshop

Crowne Plaza Washington - National Airport 1480 Crystal Drive Arlington, VA 22202

November 13-14, 2006

Tentative Agenda

DAY 1, Monday, November 13, 2006

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8:30 – 8:50 a.m.	Welcome Dr. Gary J. Foley, Director, National Center for Environmental Research, Office of Research and Development (ORD), U.S. Environmental Protection Agency (EPA)
8:50 – 9:00 a.m.	EPA Introduction Stephen A. Lingle, Division Director, Environmental Engineering Research Division, ORD, EPA
9:00 – 9:25 a.m.	EPA White Paper Update Kathryn Gallagher, Science Policy Council, EPA
9:25 – 9:45 a.m.	National Environmental and Health Implications (NEHI), National Nanotechnology Initiative (NNI) Clayton Teague, Director, National Nanotechnology Coordination Office, Nanoscale Science, Engineering, and Technology Subcommittee, NEHI, NNI
9:45 – 10:05 a.m.	BREAK
10:05 – 10:20 a.m.	National Science Foundation (NSF) Dr. Cynthia J. Ekstein, Bioengineering and Environmental Systems Division, NSF
10:20 – 10:35 a.m.	National Institute for Occupational Safety and Health (NIOSH) Dr. W. Allen Robison, Office of Extramural Programs, NIOSH
10:35 – 10:50 a.m.	National Institute of Environmental Health Sciences (NIEHS) Dr. Sally S. Tinkle, Division of Extramural Research and Training, NIEHS
10:50 – 11:10 a.m.	Bhavik Bakshi—Life Cycle Energy Analysis of Carbon Nanofibers

DAY 1, Monday, November 13, 2006 (Continued)

11:10 – 11:30 a.m.	Alison Elder
11:30 – 11:50 a.m.	Patrick O'Shaughnessy—Assessment Methods for Nanoparticles in the Workplace
11:50 a.m. – 1:00 p.m.	LUNCH
1:00 – 1:20 p.m.	Peter Perrotta—Effects of Nanomaterials On Human Blood Coagulation
1:20 – 1:40 p.m.	Judy Xiong
1:40 – 2:00 p.m.	Ron Turco
2:00 – 2:20 p.m.	Bahman Asgarian— Mechanistic Dosimetry Models of Nanomaterial Deposition in the Respiratory Tract
2:20 – 2:40 p.m.	Kent Pinkerton—Aerosolization of Respirable Carbon Nanotubes: A Potential Health Hazard?
2:40 – 3:00 p.m.	BREAK
3:00 – 3:20 p.m.	Jake McDonald—Development and Characterization of Inhalation Atmospheres for Assessment of Nanoparticle Toxicity
3:20 – 3:40 p.m.	Chris Theodorakis
3:40 – 4:00 p.m.	Nancy Monteiro-Riviere
4:00 – 4:20 p.m.	Terry Gordon
4:20 – 4:40 p.m.	Vicki Grassian—Inhalation Exposure Study of Titanium Dioxide Nanoparticles With a Primary Particle Size of 2-5 nm
4:40 – 5:30 p.m.	ORD Laboratory Panel Chair: Kevin Dreher
5:30 p.m.	ADJOURN

DAY 2, Tuesday, November 14, 2006

8:00 - 8:20 a.m.	Mamadou Diallo

 $8:20-8:40 \ a.m.$ Jean-Claude Bonzongo

DAY 2, Tuesday, November 14, 2006 (Continued)

8:40 – 9:00 a.m.	David Barber—Biochemical, Molecular, and Cellular Responses of Zebrafish Exposed to Metallic Nanoparticles
9:00 – 9:20 a.m.	Paul Westerhoff —The Fate, Transport, Transformation and Toxicity of Manufactured Nanomaterials in Drinking Water
9:20 – 10:00 a.m.	John Veranth—Responses of Lung Cells to Metals in Manufactured Nanoparticles
10:00 – 10:20 a.m.	BREAK
10:20 – 10:40 a.m.	Mason Tomson—Fate and Transport of Nano-C60 in Soils and the Use of Nano-Iron Oxides for Arsenic Removal from Drinking Water
10:40 – 11:00 a.m.	Robert Hurt—Bioavailability of Carbon Nanotube Catalyst Residues
11:00 – 11:20 a.m.	Kurt Pennell—Fate and Transport of C_{60} Nanomaterials in Unsaturated and Saturated Soils
11:20 – 11:40 a.m.	Linsey Marr—Characterization of Aqueous C ₆₀ in Water and Air
11:40 a.m. – 12:00 noon	Pat Holden
12:00 noon – 1:00 p.m.	LUNCH
1:00 – 1:20 p.m.	P. Lee Ferguson
1:20 – 1:40 p.m.	Jaehong Kim—Fate and Transformation of C_{60} Nanoparticles in Water Treatment Processes
1:40 – 2:00 p.m.	Paul Bertsch—The Bioavailability, Toxicity, and Trophic Transfer of Manufactured ZnO ₂ Nanoparticles: A View From the Bottom
2:00 – 2:20 p.m.	Tohren Kibbey —Hysteretic Accumulation and Release of Nanomaterials in the Vadose Zone
2:20 – 2:40 p.m.	CP Huang—Toxicity of Photocatalytic Nano-TiO ₂ Particles to Selected Aquatic Organisms
2:40 – 2:50 p.m.	Wrap-Up
2:50 p.m.	ADJOURN